



TED125 Technical Math II Syllabus

Course Information

Credits	3
Campus	Washburn Institute of Technology
Address	5724 SW Huntoon
City/State/Zip	Topeka, Kansas 66604
Office Fax	785-273-7080

Description

This course is a math review of practical skill as related to the drafting workplace where the students utilize plane geometry, right triangles, oblique triangles, trigonometric natural and co- functions, solutions of triangles right and oblique, computation of areas and volumes, and use of charts and graphs.
Prerequisite - TED120

Textbooks

none

Student Learning Outcomes:

- A. Communicate effectively
- B. Integrate technology
- C. Learn effectively
- D. Demonstrate cooperative teamwork skills
- E. Apply safety in the workplace
- F. Think critically and creatively
- G. Demonstrate responsible work ethics

Competencies

1. Use concepts of algebra to rearrange equations
2. Solve for an unknown given in an equation
3. Identify opposite and adjacent sides of a triangle in a given angle
4. List and use the trig functions with their ratios
5. Identify reciprocals of sine as cosecant, cosine as secant, and tangents as cotangent
6. Use the calculator to compute trig functions
7. Identify the "arc" functions as the inverse of a trig function
8. Use the calculator to compute inverse trig functions
9. Explain that solving a triangle means finding all the sides and angles
10. Solve right triangle problems
11. Solve Oblique triangles

12. List and use the Law of Sines
13. Use the Law of Cosines
14. Use rectangular coordinates to solve spacial problems
15. Use polar coordinates to solve spacial problems

Guidelines for Success

Assessment Plan

Assessment is an integral part of the educational process at Washburn Tech and accurate feedback is an important tool in continuously improving the institution's technical programs. Students can expect to participate in assessment activities prior to entry into programs, within specific courses and following program completion for specific fields of study.

Grading Criteria:

- A 92% - 100%
- B 84% - 91%
- C 76% - 83%
- D 68% - 75%
- F 67% or below

Attendance

A student can receive 1 hour make-up by completing a two page typed paper, on an approved subject, double spaced, 12 point font, and with at least 2 sources identified.

Disability

The Special Support Services (SSS) Office is responsible for assisting in arranging accommodations and for identifying resources at Washburn Institute of Technology for persons with disabilities. Qualified students with disabilities MUST register and provide documentation with the office to be eligible for services. New requests for accommodations should be submitted two months or more prior to the date services should begin; however, contact the SSS Office as soon as a need may arise. Depending on the accommodation request, four to eight week lead time may be needed for timely and effective provision of services. SSS coordinates and assist in arranging services it deems appropriate of eligible students on a case-by-case basis.

If you are a student with a disability that may substantially limit your ability to participate in this class and believe you will need accommodations, it is your responsibility to contact:

Special Support Services Coordinator

Phone: 785-228-6356

E-Mail: ssscoordinator@washburn.edu

